

## **ABSTRACT OF THE DISCLOSURE**

A processor preferably comprises a processing core that generates memory addresses to access a main memory and on which a plurality of methods operate. Each method uses its own set of local variables. The processor also includes a cache subsystem comprising a multi-way set  
5 associative cache and a data memory that holds a contiguous block of memory defined by an address stored in a register, wherein local variables are stored in said data memory.